



AE100VC

Impedance Matching Volume Control

Congratulations on your purchase of the AudioSource AE100VC Impedance Matching Volume Control. This product will allow you to install stereo speakers throughout your home and control them, without overloading your receiver or amplifier.

Please read this Manual to ensure the proper installation and best performance of your AE100VC Impedance Matching Volume Control.

Function of the AE100VC

The AE100VC features high quality audio transformers, removable solderless connection terminals and a computer grade double-sided glass-epoxy printed circuit board. An impedance matching switch multiplies the impedance the amplifier “sees” by two, four or eight times, allowing parallel connection of multiple AE100VCs without damaging the amplifier. Twelve knob positions provide a maximum of 39dB of attenuation. The AE100VC package includes a metal mounting bracket, and three sets of color matched knobs, plastic inserts, and screws. (White, Bone and Ivory)

Installation and Connection Procedures

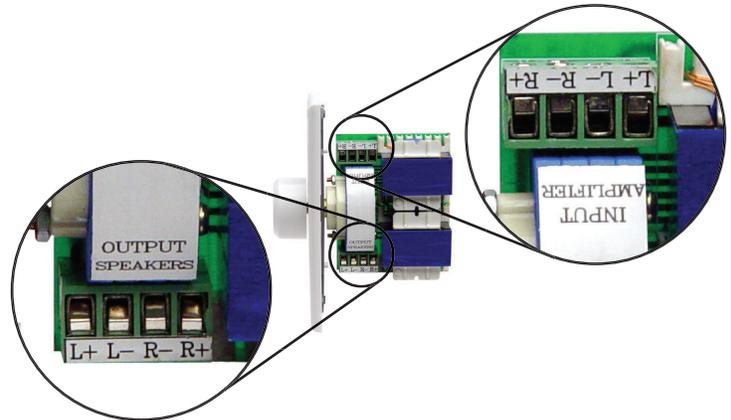
Carefully choose the location for mounting the AE100VC. For safety, and to avoid picking up hum and noise from your electrical system, never put the AE100VC into the same box as a light switch or dimmer.

Polarity (+/-) for the input and output speaker terminals is clearly marked on the rear of the AE100VC. Speaker wire is coded to identify each conductor as either positive (+) or negative (-). This may be by color coding, or one conductor may have a printed marking or a rib along one edge that you will not find on the other. Identify which type of polarity coding that your wire is using and which conductor is positive (+) or negative (-).

1. Route the speaker cables from the amplifier and each speaker pair to the location of the AE100VC paying close attention to which wires connect to the speakers and which connect to the amplifier. Mark them if needed.
2. Strip 3/8” insulation from the end of the cables and twist the exposed ends to avoid fraying.
3. Remove the speaker and amplifier connectors from the terminals marked Input and Output. Insert the wires into their respective connector positions and tighten the screws.



4. Plug the connectors onto the circuit board terminals being careful to observe markings for Input and Output. If you are using a metal J-Box, insure that none of the speaker wiring can short to the metal of the box.



Recommended Speaker Wire Gauges

The resistance of the speaker wire in your installation can cause your speakers to perform at less than their optimum quality level. Excess resistance caused by using an undersized speaker wire can result in loss of detail and definition in the bass region of your audio program, as well as loss of dynamic range. Over extremely long wire runs you may even experience a loss of high frequency content in the audio signal.

To prevent sonic degradation in your speaker installation, total speaker wire resistance should be kept below 0.5 ohms. The following table lists recommended speaker wire gauge versus wire run length.

- 50' or less - 16 Gauge 2-Cond. CL3 Rated
- 50' - 150' - 12 Gauge 2-Cond. CL3 Rated
- 150' - 200' - 10 Gauge 2-Cond. CL3 Rated

Note: UL rated CL3 speaker wire is recommended when running wire inside your walls. In many localities it may be required by code. When installing your speaker wire, avoid running the speaker wire parallel to any 120V power lines to avoid picking up hum and interference from the power service. If the speaker wire needs to cross a 120V power line at a right angle this is acceptable and will not create a problem. If you are uncomfortable with running the speaker wire yourself in existing construction, it is recommended that you retain a qualified custom home installation specialist or electrician.

Setting the Impedance Matching Switch

Set the switches to the same setting for all AE100VCs connected to an amplifier regardless of the number of speakers connected to each AE100VC.

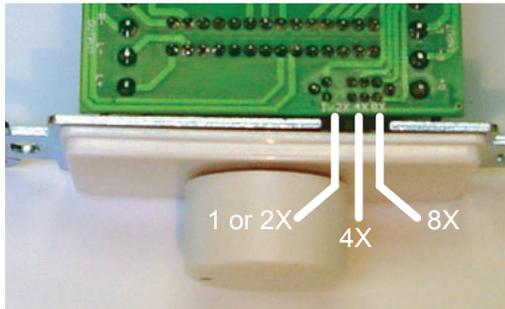
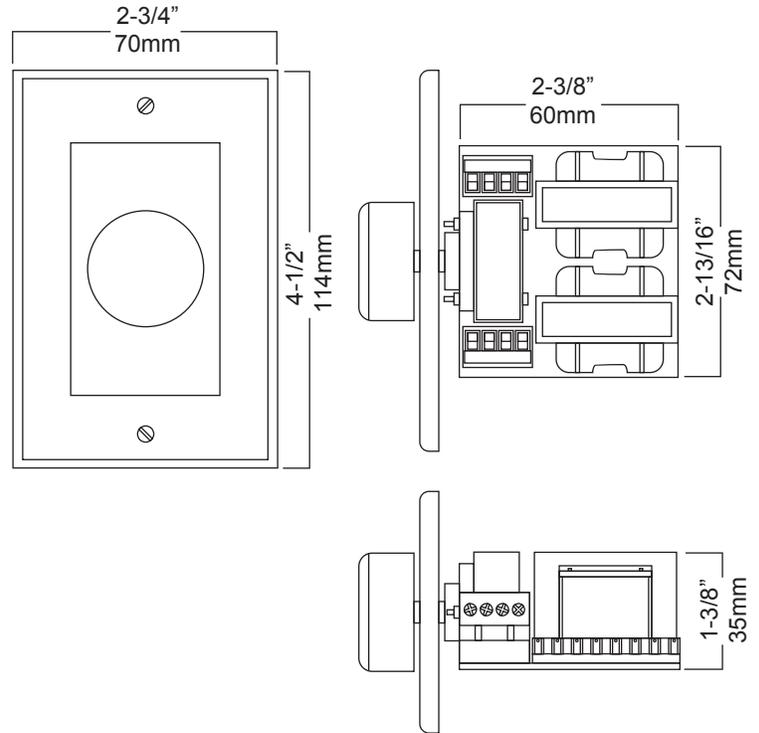


Figure 1

Figure 1 illustrates the location of the switch which allows the user to select impedance matching settings.

Multiple AE100VCs must be wired in parallel at the receiver or amp output. We recommend using the AudioSource AE6SW speaker selector to achieve this with the additional benefit of being able to turn off unused zones at the push of a button. Simply connect the zone outputs of the speaker selector to the volume controls in each of the zones. Use of speaker cable smaller than 16 gauge is not recommended.

Dimensions



Total Number of 8 ohm Speaker Pairs Connected to Amplifier or Receiver							
1	2	3	4	5	6	7	8
1X	2X	4X	4X	8X	8X	8X	8X

Switch Settings for 8 ohm Amplifiers or Receivers

Example: Four audio zones, each with a pair of speakers and a volume control, totals four speaker pairs. When wired to your 8 Ohm amplifier, all AE100VC units should have all switches set to X4 in this configuration.

Total Number of 8 ohm Speaker Pairs Connected to Amplifier or Receiver															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1X	1X	2X	2X	4X	4X	4X	4X	8X							

Switch Settings for 4 ohm Amplifiers

One Year Limited Warranty

AudioSource, a division of Peak Audio Group, LLC, warrants this product against defects in materials and workmanship for a limited period of time. For a period of one (1) year from date of original purchase, we will repair or replace the product, at our option, without charge for parts. Customer must pay for all labor charges associated with the removal and re-installation of this product for the limited period and all parts and labor charges after the limited warranty period expires. The limited warranty period for factory refurbished products expires after ninety (90) days from date of original purchase. This limited warranty applies only to purchases from authorized AudioSource Retailers or Distributors. This limited warranty is extended only to the original purchaser and is valid only to consumers in the United States.

Consumers are required to provide a copy of the original sales invoice from an authorized AudioSource Retailer or Distributor when making a claim against this limited warranty. This limited warranty only covers failures due to defects in materials or workmanship that occur during normal use. It does not cover failures resulting from accident, fire, flood, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, modification, service by anyone other than AudioSource, or damage that is attributable to Acts of God. It does not cover costs of transportation to AudioSource or damage in transit. The customer should return their defective product, freight prepaid and insured, to AudioSource only after receiving a Return Authorization.

Repair or replacement under the terms of this warranty does not extend the term of this warranty. Should a product prove to be defective in workmanship or material, the consumer's sole remedies will be repair or replacement as provided under the terms of this warranty. If the defective product is discontinued AudioSource may replace the product with an equivalent or superior product at its option. Under no circumstances shall AudioSource be liable for loss or damage, direct, consequential or incidental, arising out of the use of or inability to use the product. There are no express warranties other than described above.

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